DERWENT-ACC-NO:

1997-073175

DERWENT-WEEK:

199906

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TITLE: Water-based polymer dispersions -

comprise at least one

monomer of butadiene and isoprene, at

least one of

acrylic and methacrylic acid ester(s)

and alkanol

ester(s) and other monomer

INVENTOR: AN DE MEULEN, L; BALK, R; CLAASSEN, P;
GRAALMANN, O; VISSEREN, M
; DE MEULEN, L A

PATENT-ASSIGNEE: BALK R[BALKI] , BASF AG[BADI]

PRIORITY-DATA: 1995DE-1048313 (December 22, 1995), 1995DE-1019340 (May 26, 1995)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC JP 08319396 A December 3, 1996 N/A C08L 047/00 013 CA 2177349 A November 27, 1996 N/A 000 C08L 009/10 DE 19548313 A1 June 26, 1997 N/A C08F 236/04 014 December 11, 1996 CN 1137535 A N/AC08F 136/04 000 US 5733944 A March 31, 1998 N/A 010 C08J 009/28

APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO

APPL-DATE

JP 08319396A N/A

1996JP-0132138 May 27, 1996

CA 2177349A N/A

1996CA-2177349 May 24, 1996

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DE 19548313A1 N/A
1995DE-1048313 December 22, 1995
CN 1137535A N/A
1996CN-0110054 May 25, 1996
US 5733944A N/A
1996US-0651633 May 22, 1996
INT-CL (IPC): C08F002/08, C08F002/16, C

INT-CL (IPC): C08F002/08, C08F002/16 , C08F002/22 ,
C08F004/40 ,
C08F036/00 , C08F036/04 , C08F136/04 , C08F236/04 ,
C08J009/00 ,
C08J009/28 , C08L009/10 , C08L047/00

RELATED-ACC-NO: 1997-001211

ABSTRACTED-PUB-NO: JP 08319396A

## BASIC-ABSTRACT:

In a water-based polymer dispersion of a polymer consisting of (a) at least 50 wt. % of at least one monomer of butadiene and isoprene (monomer a), (b) at

least 10 wt. % of at least one monomer of acrylic and
methacrylic acid esters

and 1-8  $^{\circ}$  C alkanol esters (monomer b) and (c) 0-10 wt. % of another radically

copolymerisable monomer bearing at least one ethylenic unsatd. qp. (monomer c)

distributed in the dispersed state in the radically polymerised form, the total

of monomers (a) and (b) polymerisation-introduced in the radically polymerised

form is at least 90 wt. % per total of monomers (a). Also claimed are latex

foam rubbers and a method for producing large polymer particles in the

water-based polymer dispersion.

USE - The latex foam rubbers are used as mattresses, cushions and bolster materials.

ADVANTAGE - The latex foam rubbers have excellent fire retardancy without loss of physical properties of latex foam rubbers.

ABSTRACTED-PUB-NO: US 5733944A

## **EQUIVALENT-ABSTRACTS:**

In a water-based polymer dispersion of a polymer consisting of (a) at least 50 wt. % of at least one monomer of butadiene and isoprene (monomer a), (b) at least 10 wt. % of at least one monomer of acrylic and methacrylic acid esters and 1-8 C alkanol esters (monomer b) and (c) 0-10 wt. % of another radically copolymerisable monomer bearing at least one ethylenic qp. (monomer c) unsatd. distributed in the dispersed state in the radically polymerised form, the total of monomers (a) and (b) polymerisation-introduced in the radically polymerised form is at least 90 wt. % per total of monomers (a). Also claimed are latex foam rubbers and a method for producing large polymer particles in the water-based polymer dispersion.

USE - The latex foam rubbers are used as mattresses, cushions and bolster materials.

ADVANTAGE - The latex foam rubbers have excellent fire retardancy without loss of physical properties of latex foam rubbers.

CHOSEN-DRAWING: Dwg.0/0 Dwg.0/0

TITLE-TERMS: WATER BASED POLYMER DISPERSE COMPRISE ONE MONOMER BUTADIENE

ISOPRENE ONE ACRYLIC METHACRYLIC ACID ESTER ALKANOL ESTER MONOMER

DERWENT-CLASS: A12 A14 A84

CPI-CODES: A04-B05; A04-B07; A04-F06B; A07-B01; A07-B02; A12-D01; A12-S04A3; A12-S04D;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10

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D51 D54 D56
   D58 D84 ; G0340*R G0339 G0260 G0022 D01 D12 D10 D26 D51
D53 D58
   D63 F41 F89 D11 D84 D85 D86 D87 D88 D89 D90 D91 F26*R ;
S9999 S1025
   S1014 ; S9999 S1456*R ; S9999 S1309*R ; L9999 L2528
L2506 ; L9999
   L2551 L2506 ; H0124*R ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.2]
    018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; R01130 G0351 G0340 G0339 G0260 G0022 D01 D11
D10 D12 D26
    D51 D53 D58 D63 D87 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R
    ; S9999 S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506
; H0124*R
    ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.3]
    018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; R00745 G0340 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D91 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506 ;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.4]
    018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; R00642 G0340 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D84 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506 ;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.5]
    018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; R01126 G0340 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D85 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506 ;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
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Polymer Index [1.6]
    018; H0022 H0011; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; R24029 G0351 G0340 G0339 G0260 G0022 D01 D11
D10 D12 D26
    D51 D53 D58 D63 D87 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R
    ; S9999 S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506
; H0124*R
    ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.7]
    018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; G0384*R G0339 G0260 G0022 D01 D12 D10 D26 D51
D53 D58
    D63 F41 F89 D11 D85 D86 D87 D88 D89 D90 D91 D92 F26*R;
S9999 S1025
    S1014 ; S9999 S1456*R ; S9999 S1309*R ; L9999 L2528
L2506 ; L9999
    L2551 L2506 ; H0124*R ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.8]
    018 ; H0022 H0011 ; R00806 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D84 ; R00479 G0384 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D85 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506 ;
H0124*R : K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.9]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D85 ; G0340*R G0339 G0260 G0022 D01 D12 D10 D26 D51
D53 D58
    D63 F41 F89 D11 D84 D85 D86 D87 D88 D89 D90 D91 F26*R;
S9999 S1025
    S1014 ; S9999 S1456*R ; S9999 S1309*R ; L9999 L2528
L2506 ; L9999
    L2551 L2506 ; H0124*R ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.10]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D85 ; R01130 G0351 G0340 G0339 G0260 G0022 D01 D11
D10 D12 D26
   D51 D53 D58 D63 D87 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R
    ; S9999 S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506
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; H0124*R
    ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.11]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
   D58 D85 ; R00745 G0340 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D91 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506 ;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.12]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
   D58 D85 ; R00642 G0340 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D84 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R; L9999 L2528 L2506; L9999 L2551 L2506;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.13]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
   D58 D85 ; R01126 G0340 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
    D53 D58 D63 D85 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R; L9999 L2528 L2506; L9999 L2551 L2506;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.14]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D85 ; R24029 G0351 G0340 G0339 G0260 G0022 D01 D11
D10 D12 D26
    D51 D53 D58 D63 D87 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R
    ; S9999 S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506
: H0124*R
    ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.15]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
    D58 D85 ; G0384*R G0339 G0260 G0022 D01 D12 D10 D26 D51
D53 D58
    D63 F41 F89 D11 D85 D86 D87 D88 D89 D90 D91 D92 F26*R;
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S9999 S1025
   S1014 ; S9999 S1456*R ; S9999 S1309*R ; L9999 L2528
L2506 ; L9999
   L2551 L2506 ; H0124*R ; K9723 ; K9370 ; P0328 ; P0088
Polymer Index [1.16]
    018 ; H0022 H0011 ; R00429 G0828 G0817 D01 D02 D12 D10
D51 D54 D56
   D58 D85 ; R00479 G0384 G0339 G0260 G0022 D01 D11 D10
D12 D26 D51
   D53 D58 D63 D85 F41 F89 ; S9999 S1025 S1014 ; S9999
S1456*R ; S9999
    S1309*R ; L9999 L2528 L2506 ; L9999 L2551 L2506 ;
H0124*R ; K9723
    ; K9370 ; P0328 ; P0088
Polymer Index [1.17]
    018 ; R00806 G0828 G0817 D01 D02 D12 D10 D51 D54 D56
D58 D84 ; R00429
   G0828 G0817 D01 D02 D12 D10 D51 D54 D56 D58 D85 ;
G0022*R D01 D51
    D53 H0215 ; G0817*R D01 D51 D54 H0215 ; G0975*R D01 D51
D55 H0215
    ; G0340*R G0339 G0260 G0022 D01 D12 D10 D26 D51 D53 D58
D63 F41
    F89 D11 D84 D85 D86 D87 D88 D89 D90 D91 F26*R ; R01130
G0351 G0340
   G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63
D87 F41 F89
    ; R00745 G0340 G0339 G0260 G0022 D01 D11 D10 D12 D26
D51 D53 D58
    D63 D91 F41 F89 ; R00642 G0340 G0339 G0260 G0022 D01
D11 D10 D12
    D26 D51 D53 D58 D63 D84 F41 F89 ; R01126 G0340 G0339
G0260 G0022
    D01 D11 D10 D12 D26 D51 D53 D58 D63 D85 F41 F89 ;
R24029 G0351 G0340
   G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63
D87 F41 F89
    ; G0384*R G0339 G0260 G0022 D01 D12 D10 D26 D51 D53 D58
D63 F41
    F89 D11 D85 D86 D87 D88 D89 D90 D91 D92 F26*R; R00479
G0384 G0339
    G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D85 F41
F89; S9999
    S1025 S1014 ; S9999 S1456*R ; S9999 S1309*R ; L9999
L2528 L2506
    ; L9999 L2551 L2506 ; H0124*R ; K9723 ; K9370 ; S9999
S1025 S1014
    ; S9999 S1456*R ; S9999 S1309*R ; L9999 L2528 L2506 ;
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L9999 L2551 L2506 ; H0124\*R ; K9723 ; K9370 ; H0033 H0011 ; P0328 ; P0088 Polymer Index [1.18] 018 ; ND04 ; B9999 B5209 B5185 B4740 ; B9999 B4842 B4831 B4740 ; B9999 B4239 ; B9999 B3792 B3747 ; B9999 B3907 B3838 B3747 ; B9999 B3838\*R B3747 ; Q9999 Q9325 ; Q9999 Q7749 Q7681 ; ND10 ; B9999 B5094 B4977 B4740 ; N9999 N6826 N6655 ; N9999 N6144 ; Q9999 Q7716 Q7681 ; ND01 Polymer Index [1.19] 018 ; R05252 D01 D11 D10 D14 D13 D31 D50 D76 D90 F48 ; C999 C088\*R C000 ; C999 C293

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1997-023652